516-622 of ER beta. Other experiments indicate that MAD2 does not interact with RAR or RXR (two steroid hormone families members), further underscoring the specificity of the MAD2/ER beta interaction.--

B2

In the Claims:

Kindly amend claims 1, 2, and 6 to read as follows.

1. (Amended) A method for determining whether a test compound is capable of affecting cell division, said method comprising:

a) contacting said test compound with isolated estrogen receptor beta (ERβ) and mitosis arrest deficient 2 (MAD2), or a binding fragment thereof, under conditions in which ERβ and MAD2, or a fragment thereof, have formed, or are able to form, a complex; and

B3

b) determining whether said test compound affects said ERβ/MAD2 complex or complex formation, as an indication that said test compound is capable of affecting cell division.

2. (Amended) The method of claim 1, wherein said MAD2 is encoded by a nucleic acid molecule comprising the sequence set forth in SEQ ID NO: 3.

6. (Amended) The method of claim 1, wherein said ERβ additionally comprises

glutathione-S-transferase (GST) and said complex or complex formation is determined using a GST-fusion protein interaction assay.

Kindly add new claim 9-12 to read as follows.

9. (New) A method for determining whether a test compound is capable of affecting cell division, said method comprising:

a) contacting said test compound with a GST-ERβ-fusion protein and MAD2, or a binding fragment thereof, under conditions in which said GST-ERβ-fusion protein and MAD2, or a fragment thereof, have formed, or are able to form, a complex; and

b) determining whether said test compound affects said GST-ERβ-fusion protein/MAD2 complex or complex formation, as an indication that said test compound is capable of affecting cell division.

10. (New) A method for determining whether a test compound is capable of affecting cell division, said method comprising:

a) contacting said test compound with an isolated ERβ polypeptide comprising the amino acid sequence set forth in SEQ ID NO: 7 and MAD2, or a binding fragment thereof, under conditions in which said ERβ polypeptide and MAD2, or a fragment thereof, have formed, or are able to form, a complex; and

b) determining whether said test compound affects said ERβ polypeptide/MAD2

complex or complex formation, as an indication that said test compound is capable of affecting cell division.

11. (New) The method of claim 10, wherein said MAD2 is encoded by a nucleic acid molecule comprising the sequence set forth in SEQ ID NO: 3.

B5

12. (New) The method of claim 10, wherein said ERβ polypeptide additionally comprises GST and said complex or complex formation is determined using a GST-fusion protein interaction assay.